10/218/882

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp	
L1	488	(544/400,544/336).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/08/14 15:57	
L2	209	I1 and piperazine	US-PGPUB; USPAT	OR	ON	2007/08/14 15:58	
L3	68	l1 and piperazin!	US-PGPUB; USPAT	OR	ON	2007/08/14 15:58	
L4	50	l3 and dimethyl	US-PGPUB; USPAT	OR	ON	2007/08/14 15:58	
L5	49	l4 and phenyl	US-PGPUB; USPAT	OR	ON	2007/08/14 15:58	
L6	17	I5 and acetamide	US-PGPUB; USPAT	OR	ON	2007/08/14 15:59	
L7	0	l6 and lidocaine	US-PGPUB; USPAT	OR	ON	2007/08/14 15:59	
L8	1	I6 and haloacetyl	US-PGPUB; USPAT	OR	ON	2007/08/14 16:00	
L9	0	l8 and xylidine	US-PGPUB; USPAT	OR	ON	2007/08/14 16:00	

```
10/518,887
```

Connecting via Winsock to STN

```
Welcome to STN International! Enter x:x
```

LOGINID: SSPTAEAL1624

specific topic.

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
NEWS
                Web Page for STN Seminar Schedule - N. America
      1
NEWS
     2 MAY 01
                New CAS web site launched
NEWS
      3 MAY 08
                CA/CAplus Indian patent publication number format defined
NEWS 4 MAY 14
                RDISCLOSURE on STN Easy enhanced with new search and display
                 fields
NEWS
    5 MAY 21
                BIOSIS reloaded and enhanced with archival data
NEWS
     6 MAY 21
                TOXCENTER enhanced with BIOSIS reload
NEWS
        MAY 21 CA/CAplus enhanced with additional kind codes for German
                patents
NEWS 8
        MAY 22
                CA/CAplus enhanced with IPC reclassification in Japanese
                patents
NEWS 9
        JUN 27
                CA/CAplus enhanced with pre-1967 CAS Registry Numbers
NEWS 10
        JUN 29
                STN Viewer now available
NEWS 11 JUN 29
                STN Express, Version 8.2, now available
NEWS 12 JUL 02 LEMBASE coverage updated
NEWS 13 JUL 02 LMEDLINE coverage updated
NEWS 14 JUL 02 SCISEARCH enhanced with complete author names
NEWS 15 JUL 02 CHEMCATS accession numbers revised
NEWS 16 JUL 02 CA/CAplus enhanced with utility model patents from China
NEWS 17 JUL 16 CAplus enhanced with French and German abstracts
NEWS 18 JUL 18 CA/CAplus patent coverage enhanced
NEWS 19 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 20 JUL 30 USGENE now available on STN
NEWS 21 AUG 06
                CAS REGISTRY enhanced with new experimental property tags
NEWS 22 AUG 06 BEILSTEIN updated with new compounds
NEWS 23 AUG 06
                FSTA enhanced with new thesaurus edition
NEWS 24 AUG 13
                CA/CAplus enhanced with additional kind codes for granted
                patents
NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
              Welcome Banner and News Items
NEWS IPC8
              For general information regarding STN implementation of IPC 8
```

<12/04/2007> Erich Leese

Enter NEWS followed by the item number or name to see news on that

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation

of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 13:34:51 ON 14 AUG 2007

=> file re

'RE' IS AN AMBIGUOUS FILE OR CLUSTER NAME

REACTION

- Reactions Cluster

RESEARCH

- Research Cluster

REGISTRY

- The CAS Registry File of substances

ENTER FILE OR CLUSTER NAME (IGNORE): file req

'FILE' IS NOT A VALID FILE NAME

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.

ENTER A FILE NAME OR (IGNORE):

ENTER A FILE NAME OR (IGNORE):.

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY SESSION

0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 13:35:11 ON 14 AUG 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 AUG 2007 HIGHEST RN 944501-68-2 DICTIONARY FILE UPDATES: 13 AUG 2007 HIGHEST RN 944501-68-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> file req

COST IN U.S. DOLLARS

SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST

0.45 0.66

FILE 'REGISTRY' ENTERED AT 13:35:13 ON 14 AUG 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 AUG 2007 HIGHEST RN 944501-68-2 DICTIONARY FILE UPDATES: 13 AUG 2007 HIGHEST RN 944501-68-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\Stnexp\Queries\10518887casreact.str

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

MULTIPLE ROLE QUERIES ARE NOT ALLOWED IN A NON-REACTION FILE

=> s l1

MULTIPLE ROLE QUERIES ARE NOT ALLOWED IN A NON-REACTION FILE

=> file casreact
COST IN U.S. DOLLARS

SINCE FILE

TOTAL

<12/04/2007> Erich Leese

FULL ESTIMATED COST ENTRY SESSION 1.80 2.46

FILE 'CASREACT' ENTERED AT 13:37:36 ON 14 AUG 2007 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1840 - 11 Aug 2007 VOL 147 ISS 8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>
Uploading C:\Program Files\Stnexp\Queries\10518887casreact.str

L2 STRUCTURE UPLOADED

=> s 12 full

FULL SEARCH INITIATED 13:38:37 FILE 'CASREACT'

SCREENING COMPLETE - 362 REACTIONS TO VERIFY FROM

100.0% DONE 362 VERIFIED 13 HIT RXNS 8 DOCS

SEARCH TIME: 00.00.01

L3 8 SEA SSS FUL L2 (13 REACTIONS)

=> d ibib abs hitstr tot

'HITSTR' IS NOT A VALID FORMAT FOR FILE 'CASREACT'

The following are valid formats:

ABS ----- GI and AB

ALL ----- BIB, AB, IND, RE, Single-step Reactions

APPS ----- AI, PRAI

BIB ----- AN, plus Bibliographic Data

CAN ----- List of CA abstract numbers without answer numbers

CBIB ----- AN, plus Compressed Bibliographic Data

DALL ----- ALL, delimited (end of each field identified)

IABS ----- ABS, indented with text labels IALL ----- ALL, indented with text labels

IBIB ----- BIB, indented with text labels

IND ----- Indexing data

37 DOCUMENTS

ISTD	International Patent Classifications STD, indented with text labels - AN, plus Bibliographic Data (original) - OBIB, indented with text labels
	- BIB, no citations - IBIB, no citations
MAX PATS SCAN	
	Single-Step Reactions (Map, Diagram, and Summary for all single-step reactions) BIB, IPC, and NCL
CRDREF	Compact Display of All Hit Reactions Compact Reaction Display and SO, PY for Reference Reaction Map, Diagram, and Summary for first hit reaction
FCRD FCRDREF	FHIT, AN plus CBIB First hit in Compact Reaction Display (CRD) format First hit in Compact Reaction Display (CRD) format with CA reference information (SO, PY). (Default)
FSPATH	PATH, plus Reaction Summary for the "long path" SPATH, plus Reaction Summary for the "short path" Reaction Map, Reaction Diagram, and Reaction Summary for all hit reactions and fields containing hit terms
OCC	All hit fields and the number of occurrences of the hit terms in each field. Includes total number of HIT, PATH, SPATH reactions. Labels reactions that have incomplete verifications.
PATH	Reaction Map and Reaction Diagram for the "long path". Displays all hit reactions, except those whose steps are totally included within another hit reaction which is displayed
RXG RXL RXS	Hit Reactions (Map, Diagram, Summary for all hit reactions) Hit Reaction Graphics (Map and Diagram for all hit reactions) Hit Reaction Long (Map, Diagram, Summary for all hit reactions) Hit Reaction Summariers (Map and Summary for all hit reactions) Reaction Map and Reaction Diagram for the "short path". Displays all single step reactions which contain a hit substance. Also displays those multistep reactions that have a hit substance in both the first and last steps of the reaction, except for those hit reactions whose steps are totally included within another hit reaction which is displayed

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of combinations include: D TI; D BIB RX; D TI, AU, FCRD. The information is displayed in the same order as the specification. All of the formats, except CRD, CRDREF, FHIT, PATH, FPATH, SPATH, FSPATH, FCRD, FCRDREF, HIT, RX, RXG, RXS, SCAN, and OCC, may be used with the DISPLAY command to display the record for a specified Accession Number.

ENTER DISPLAY FORMAT (FCRDREF):.

L3 ANSWER 1 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 10 NH-C-CH2C1 1. Piperazine, EtOH Me 2. NH4OH, Water (step 1)

$$\begin{array}{c|c} \text{HN} & \text{O} & \text{Me} \\ \hline \text{N} & \text{CH}_2 - \text{C} - \text{NH} \\ \hline \end{array}$$

71%

REF: Faming Zhuanli Shenqing Gongkai Shuomingshu, 1915982, 21 Feb

2007

CON:

STAGE(1) 4 hours, reflux STAGE(2) pH 8 - 9

L3 ANSWER 2 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 17 NH-C-CH2C1 1. Piperazine, EtOH Me Me 2. NH3, Water (step 1)

HN N—
$$CH_2$$
— $C-NH$ — Me

75%

REF: Zhongguo Yaowu Huaxue Zazhi, 13(5), 283-285; 2003 STAGE(1) 4 hours, reflux; reflux -> room temperature CON:

STAGE(2) pH 8 - 9

L3 ANSWER 3 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

(step 1)

1. Piperazine, EtOH 2. NH3, Water

$$\begin{array}{c|c} \text{HN} & \text{O} & \text{Me} \\ \text{N---} & \text{CH}_2 - \text{C---} & \text{NH} \\ \text{Me} \end{array}$$

61%

Zhongguo Yiyao Gongye Zazhi, 35(11), 641-642; STAGE(1) 3 hours, room temperature -> reflux STAGE(2) pH 10 REF: 2004

CON:

COPYRIGHT 2007 ACS on STN L3ANSWER 4 OF 8 CASREACT

RX(9) OF 51

1. Piperazine, Et20 2. NH3, Water

(step 1)

$$\begin{array}{c|c} \text{HN} & \text{O} & \text{Me} \\ \text{N---} & \text{CH}_2\text{---} & \text{C---} & \text{NH} \\ \text{Me} \end{array}$$

Biocatalysis and Biotransformation, 23(1), 45-51; 2005 REF:

CON: 2 hours, reflux

CASREACT COPYRIGHT 2007 ACS on STN L3 ANSWER 5 OF 8

RX(57) OF 144

1. Piperazine, Na2CO3,

THF 2. KOH

(step 1)

RX(57) OF 144

PCT Int. Appl., 2005025498, 24 Mar 2005 REF:

STAGE(1) 3 days, room temperature STAGE(2) room temperature, basify CON:

ANSWER 6 OF 8 CASREACT COPYRIGHT 2007 ACS on STN L3

RX(1) OF 10

Guangxi Daxue Xuebao, Ziran Kexueban, 28(4), 301-303; 2003

3 hours, 80 - 90 deg C

L3 ANSWER 7 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1

O

NH-C-CH₂C1

Me

$$+$$

HN

NH

1. HCl, Water

(step 2)

REF: PCT Int. Appl., 2004000824, 31 Dec 2003

NOTE: optimization study

STAGE(1) room temperature -> 45 deg C; 45 deg C -> 25 deg C STAGE(2) 80 deg C; 2 hours CON:

L3 ANSWER 8 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1

O

NH-C-CH₂Cl

Me

Me

$$Me$$
 HN
 $1. HCl, Water$
 $3. NaOH, Water$

70%

REF: Organic Process Research & Development, 7(6), 939-941; NOTE: safety, optimization study, optimized on solvent, time,

stoichiometry, HCl amount, pilot-plant, scalable

STAGE(1) room temperature -> 45 deg C; 45 deg C -> 25 deg C STAGE(2) 25 deg C -> 80 deg C; 2 hours, 80 deg C; 80 deg C -> 60 deg C CON:

STAGE(3) 60 deg C, pH >10

=> d his

(FILE 'HOME' ENTERED AT 13:34:51 ON 14 AUG 2007)

	FILE	'REGISTRY'	ENTERED	AT	13:35:11	ON	14	AUG	2007
Ll	FILE	'REGISTRY' STRU	ENTERED CTURE UPI			ON	14	AUG	2007
L2 L3	FILE	'CASREACT' STRUC 8 S L2	CTURE UPI			ON	14	AUG	2007